

# VU Research Portal

## Risk factors for domestic violence in Curacao

van Wijk, N.Ph.L.; de Bruijn, J.G.M.

### **published in**

Journal of Interpersonal Violence  
2012

### **DOI (link to publisher)**

[10.1177/0886260512441074](https://doi.org/10.1177/0886260512441074)

### **document version**

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

### **citation for published version (APA)**

van Wijk, N. P. L., & de Bruijn, J. G. M. (2012). Risk factors for domestic violence in Curacao. *Journal of Interpersonal Violence*, 27(15), 3032-3053. <https://doi.org/10.1177/0886260512441074>

### **General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

### **Take down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

### **E-mail address:**

[vuresearchportal.ub@vu.nl](mailto:vuresearchportal.ub@vu.nl)

# Journal of Interpersonal Violence

<http://jiv.sagepub.com/>

---

## **Risk Factors for Domestic Violence in Curacao**

N. Ph. L. van Wijk and J. G. M. de Bruijn

*J Interpers Violence* 2012 27: 3032 originally published online 24 July 2012

DOI: 10.1177/0886260512441074

The online version of this article can be found at:

<http://jiv.sagepub.com/content/27/15/3032>

---

Published by:



<http://www.sagepublications.com>

On behalf of:

[American Professional Society on the Abuse of Children](#)

**Additional services and information for *Journal of Interpersonal Violence* can be found at:**

**Email Alerts:** <http://jiv.sagepub.com/cgi/alerts>

**Subscriptions:** <http://jiv.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations:** <http://jiv.sagepub.com/content/27/15/3032.refs.html>

>> [Version of Record](#) - Sep 23, 2012

[OnlineFirst Version of Record](#) - Jul 24, 2012

[What is This?](#)

# Risk Factors for Domestic Violence in Curacao

Journal of Interpersonal Violence

27(15) 3032–3053

© The Author(s) 2012

Reprints and permission:

sagepub.com/journalsPermissions.nav

DOI: 10.1177/0886260512441074

<http://jiv.sagepub.com>



**N. Ph. L. van Wijk<sup>1</sup> and J. G. M. de Bruijn<sup>2</sup>**

## Abstract

One out of three people (25% of men, 38% of women) in Curacao have experienced some form of domestic violence at some point in their adult lives. The most significant risk factors for domestic violence in Curacao are the female gender, a young age, low education, and experiencing domestic violence victimization in childhood. Divorce, single parenthood, and unemployment increase the risk for women, but not for men. These findings are consistent with current literature on the subject. Further research on the context, nature, and severity of domestic violence in the Caribbean is necessary. Studies should preferably combine the strengths of national crime surveys and family conflict studies: nationally representative samples (including men and women) and questionnaires that include all possible experiences of psychological, physical, and sexual assaults by current and former partners, family, and friends.

## Keywords

risk factors, domestic violence, intimate partner violence, Caribbean

---

<sup>1</sup>Ministry of Health, Environment, and Nature of Curacao

<sup>2</sup>University of the Netherlands Antilles

## Corresponding Author:

N. Ph. L. van Wijk

Email: [nikil.vanwijk@gmail.com](mailto:nikil.vanwijk@gmail.com)

## Introduction

Much of what is known about domestic violence (DV) prevalence and risk factors stems from research carried out in Western countries, in particular the United States (Barnish, 2004). There is some literature on domestic violence in developing countries (World Health Organization [WHO], 2002, 2006), but the focus in these reports is almost exclusively on DV against women and children. Differences in victimization rates and risk factors between genders in developing countries are still largely unknown but may differ dramatically from those in western nations. Archer (2006) researched cross-cultural differences in physical aggression between partners and found figures on domestic violence in developed nations did not generalize to all other countries: nation characteristics like gender empowerment, individualism, and sexist attitudes are strongly correlated with gender differences in victimization. It is difficult to typify the Caribbean, or more specifically in Curacao, in this respect, and to make assumptions on gender differences in domestic violence victimization rates. Indicators for high gender empowerment are present in Curacao's matrifocal culture (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2010): female employment rates are similar to those of males (Centraal Bureau voor de Statistiek Nederlandse Antillen, 2009), and women are more highly educated than men, especially in the younger generations (van Wijk, 2004). High gender empowerment is associated with gender symmetry in DV victimization. On the other hand, the presence of sexism and machismo (Marscha & Verweel, 2005) are associated with larger victimization rates for women (Archer, 2006).

Domestic violence is not limited to violence between intimate partners (IPV) but includes violence between other household and family members, and friends. In contrast to the relatively isolated Western-style nuclear family, family structures in the Caribbean are often characterized by (grand)mother-dominated households with several generations living in the same house or in houses built close to each other, sharing resources (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2010; Seegobin, 2002). The presence of many relatives, in-laws, and other extended family members has been studied as both a potential cause of intimate partner violence as well as a protective factor (Clark, 2010; Eswaran & Malhotra, 2008); both mechanisms may take effect in the Curacao population.

In summary, the available literature on DV prevalences, risk factors, and gender differences offer few clues on the situation in the Caribbean. This article aims to contribute to filling this knowledge gap.

## *Gender and Domestic Violence*

A large proportion of the literature on risk factors for domestic violence focuses on female victims. Important sources of information on the prevalence of (domestic) violence against men and women are crime victimization studies, for example, Tjaden and Thoennes (2000), Kershaw (2001), Watson and Parsons (2005). These studies use large nationally representative samples and include physical and sexual assaults by current and former partners. Crime victimization studies typically find a dramatic gender asymmetry in rates of domestic violence, prevalences for women being over five times as high as for men. Women are also more likely to experience more repeat victimization and more severe, dangerous violence, like being beaten up, choked, strangled, suffocated, threatened/assaulted with a weapon, or sexually assaulted, as well as more death, injury, and hospitalization (Gadd, 2002; Johnson & Bunge, 2001; Richards 2003; Saunders 2002; Tjaden & Thoennes, 2000).

Another source of data on domestic violence against men and women stems from family conflict studies, like smaller scale, nationally representative household surveys (McKinney, 2010; Straus, 2000), and nonrepresentative convenience samples of college students or dating couples. Family conflict studies tend to find much more gender symmetry than crime victimization studies. Apart from the sampling techniques, crime victimization studies differ from family conflict studies on the following aspects: family conflict studies include psychological violence (crime surveys do not, except for stalking), but only deal with conflicts with a current partner (crime surveys include assaults by ex-partners). Furthermore, the measurement of physical violence victimization in crime studies is often limited to more severe forms of violence, whereas family conflict studies take account of all possible experiences of physical violence, including those that do not result in injury and are not thought to be a crime.

Why do family conflict studies find gender symmetry in domestic violence, while crime victimization studies find an overwhelming majority of male perpetrators and female victims? Most importantly, family conflict studies include minor forms of physical violence and psychological DV, while crime victimization studies tend to focus on more severe forms of physical violence. Second, the family conflict studies do not take into account the context of the violence, so fighting in self-defense (which is unlikely to show up in crime victimization studies statistics) is also counted as an act of violence.

An important distinction in this context is the difference between “situational couple violence,” also known as “common couple violence,” and “intimate terrorism” (Johnson, 2005). Common couple violence is

expressive and characterized by minor forms of violence. It often arises out of frustration, for example, the partner is pushed or slapped to get their attention. Gender symmetry tends to be found at this lower end of violence (Kimmel, 2002). Intimate terrorism on the other hand is instrumental to control, subdue, and reproduce subordination. Compared to common couple violence, it is more rare and serious, it escalates over time, and is typically perpetrated by men (Johnson, 2008).

## **Prevalences**

DV victimization rates for women in Latin America and the Caribbean lie mostly between 20% and 30% for physical violence, and between 10% and 15% for sexual violence (Heise, Pitanguy, & Germain, 1994; WHO, 2006). Data on domestic violence against men in Latin America and the Caribbean are not available,<sup>1</sup> but data from Western studies show that the prevalence of physical DV victimization in the United States and the United Kingdom is more than twice as high for women compared to men (7%-10% of men, 21%-22% of women) but equal in Ireland (13%; Kershaw, 2001; Tjaden & Thoennes, 2000; Watson & Parsons, 2005). However, when minor physical violence is left out, the prevalence is 9% for Irish women and 4% for Irish men. The prevalence of sexual DV victimization is less than 2% for men in these three countries, but 8% for women in the United States and Ireland, and 17% for British women.

## **Risk Factors**

Little is known on risk factors for becoming a victim of domestic violence in the Caribbean. The WHO (2006) have investigated the influence of age, partnership status, and education on prevalence figures for women in developing countries, but in a vast amount of mainly Western literature, various other factors have been identified that appear to increase the risk of becoming or remaining a victim of DV, or of experiencing more damaging consequences. The risk factors on which most consensus exists are the female gender, DV victimization in childhood, a young age, having children or being pregnant, separation from partner, low socioeconomic status, and drug or alcohol use. These factors will be discussed in more detail in the following paragraphs. There is little or no evidence that the personalities or behavior of women contribute to their own victimization; any dysfunctional behavior appears to be the consequence of abuse rather than the cause (Barnish, 2004).

*Childhood victimization.* Abuse in childhood or during adolescence increases the likelihood of adult IPV victimization for men and women (Gomez, 2011).

Several reviews have indicated that women who are victims of DV are more likely to have been abused as children, even with demographic differences taken into account (Riggs, Caulfield, & Street, 2000; Schumacher, Slep, & Heyman, 2001). Coid (2000) found that the risk of experiencing domestic violence was four times higher for women who were severely beaten in childhood and up to six times higher for women who were sexually abused in childhood. Ehrensaft et al. (2003) found that the risk of injury producing partner assaults was almost five times as high for people who had been physically abused in childhood. Siegel and Williams (2001) also found that women who had been sexually abused as minors had an increased risk of IPV victimization as adults.

**Age.** Richardson et al. (2002) found abuse rates to be significantly lower among women above 45, compared to younger women. Although youth is identified as a risk factor for DV victimization in many community surveys, these associations may be, partly, attributable to the fact that younger women are more likely to associate with younger men who are generally more violent, or because younger women are more willing to disclose violence (Bunge & Locke, 2000). Schumacher et al. (2001) conclude after reviewing both large and small scale studies that correlations between age and DV victimization are weak or inconsistent. The WHO study on intimate partner violence against women in 15 developing countries (2005) identified younger women, especially those aged 15 to 19 years, to be at higher risk of physical or sexual violence in most countries.

**Having children.** Women with children appear to be more vulnerable to continued abuse. They are less likely to leave and more likely to return to violent relationships, due to reluctance to break up the home and family life and because many mothers are not financially independent (Allen 2004; WHO, 2002). Richardson et al. (2002) found that having children significantly increases the risk of ever experiencing physical violence for women. But the relationship between incidence of domestic violence and having children may be partly attributable to the fact that younger women are more likely to experience partner assaults and also to be raising children (Walby & Myhill, 2001).

**Socioeconomic status.** According to the WHO (2002), women living in poverty are disproportionately affected by partner violence. Financial stresses in the relationship may increase the risk of domestic violence, and it may be harder to leave violent relationships for women without sufficient economic and educational resources (Allen, 2004). A higher education is associated with less violence in many settings, and there is also some evidence that having a job outside the home is an enabling factor to leave an abusive relationship, providing economic independence as well as a stable source of social support (WHO, 2002).

*Separation.* Violence often starts, or increases, when a couple is separating. Walby and Myhill (2001) did a review of U.K. literature and concluded that separation is a high risk factor for domestic violence. Johnson, Leone, and Xu. (2008) found that situational couple violence doubles after separation, but intimate terrorism victimization increases from less than 1% of current couples, to 5% of ex-husbands and more than 20% of ex-wives. Half of all stalking cases involve ex-partners (Douglas & Dutton, 2001; Melton, 2000; Tjaden & Thoennes, 2001). The risk of domestic violence homicide is also strongly associated with separation. In the WHO study (2002), it was found women who had been separated or divorced reported much more partner violence during their lifetime than currently married women. An important nuance to these figures is that victims of intimate terrorism in their current relationship tend to refuse to participate in this type of survey research, so intimate terrorism victimization may be more severely underestimated in current couples, than in separated couples (Johnson et al., 2008).

*Alcohol and drugs.* Substance-dependent people may remain longer in violent relationships because drug and alcohol use blurs people's judgments and perceptions. This may contribute to self-blaming and delay in recognizing abuse as a problem (Burke, Gielen, McDonnell, O'Campo, & Maman, 2001). Foran (2008) concludes from a meta-analytical review of alcohol and intimate partner violence that there is a small to moderate effect size for the association between alcohol use or abuse and intimate partner violence. There is also some evidence that women who are problem drinkers are more likely to choose a heavy drinking partner, which increases their risk of abuse.

## Method

This section contains a summary of the methodology used. For a full description of the methodology, see "Technical Report 1: Questionnaire Development and Operationalization" and "Technical Report 2: Data Collecting" (van Wijk 2011a, 2011b).

### *Sample and Fieldwork*

Waiting area intercept surveying was used as sampling technique. The fieldwork took place during 2 months in 2009, in four public waiting rooms in Curacao: the governmental registry office, the largest local health insurance company, a governmental food handling permit distribution unit, and a medical facility. These locations are visited by citizens and clients of all social strata and waiting times are, in general, at least an hour, which gives



**Table 1.** Sex, Age, and Level of Education of Respondents

	Count	Percentage
Sex		
Men	325	40
Women	491	60
Age		
18-29	220	27
30-39	169	21
40-49	168	21
50-59	134	16
60+	125	15
Education		
No education/ primary education	84	11
Prevocational secondary education	292	37
Secondary vocational education	172	22
Sen. gen. secondary education/preuniversity education	86	11
Higher professional education/university	162	20
Total	816	100

ample time to fill out the questionnaire. Low educated and elderly people were somewhat underrepresented, this was partially compensated for by carrying out additional fieldwork in social clubs for seniors.

Two researchers of the Public Health Research and Policy Unit trained a team of four interviewers for this fieldwork. The people in the waiting rooms were approached by one of these interviewers, with the request to participate in a local survey of the Medical and Public Health service. After completing the questionnaire, the respondent received a small gift. A total of 816 completed questionnaires were collected (see Table 1).

All participants were offered the choice to fill in the questionnaire anonymously or have an interviewer read the questions and fill in the answers for them. This study uses a mixed-mode design,<sup>2</sup> in which each respondent personally decides with which way of participating in the study he or she feels most comfortable. The response rate (the number of total surveys, divided by the number of qualified, targeted respondents approached by interviewers) was 91%.

### **Questionnaire**

The standardized questionnaire was based on scientific literature on domestic violence and similar questionnaires about health topics and domestic

**Table 2.** Variables Measuring Experiences of Domestic Violence as a Victim

Category	Alpha (Per Category)	Subcategories
Psychological	As a child, $\alpha = .74$	Humiliate (2 items)
	As an adult, $\alpha = .62$	Restrict contact with others (4 items) <sup>a</sup>
		Restrict freedom (4 items) <sup>a</sup>
Physical	As a child, $\alpha = .75$	Threaten (2 items)
	As an adult, $\alpha = .84$	Push, hold too hard, confine (3 items)
		Hit, kick, hit with objects, cut, burn (4 items)
Sexual	As a child, $\alpha = .85$	Sexual threats, exhibitionism (3 items)
	As an adult, $\alpha = .83$	Sexual assault, rape (3 items)

a. n.a. for childhood experiences.

violence (Bos en Van Zanden, 2004; Dijk et al., 1997; GGD Amsterdam, 2008; Goderie en ter Woerds, 2005; Lünneken en Bruinsma, 2005; Straus et al., 1996). The questionnaire was available in Papiamentu<sup>3</sup> and Dutch.

Experiences with domestic violence were subdivided in psychological, physical, and sexual violence. A multiresponse structure was used to measure life course victim experience; for each of the items, the respondent could tick one or more answer categories: “yes, as a child (<18),” “yes, as an adult, over a year ago,” and “yes, as an adult, less than a year ago.” To distinguish nonresponse from nonvictims, a fourth category “no, never” was added. Table 2 shows the different categories and subcategories that were used. Cronbach’s alphas are calculated separately for “as a child” and “as an adult,” per category.

To measure the severity of the violence experienced, we used two methods: the severity weighted scale method of Straus and Gelles and the dichotomous score “minor only”/“severe” from the Revised Conflict Tactics Scale (Straus & Douglas, 2004). For both these methods, each form of violence gets a weight, which reflects the injury producing potential.

## Data Analysis

Logistic regression analyses were carried out to identify significant relationships between risk factors and victim prevalence. Additionally, CHAID (“chi-square Automatic Interaction Detector,” part of SPSS Answer Tree) was used to identify subgroups with the largest proportion of victims. CHAID is a multivariate exploratory technique and a nonparametric alternative to the hierarchical regression approach; it has no restrictions regarding the measurement level or the frequency distribution of the variables.

In the first step, CHAID examines each pair of predictor categories for significance with respect to the dependent variable in the total sample. Bonferroni adjusted chi-square tests determine which categories are merged; categories merge when their relationship with the dependent variable is similar. Finally, the most significant predictor is selected for segmenting the sample. In the next step, CHAID moves down the tree, splitting on the best predictor, and analyses each subgroup in turn. This process is continued until there is no significant predictor ( $p > .05$ ), or the specified stopping rules are fulfilled (e.g. minimum number of cases in a subgroup = 25; Herschbach, 2004).

## Results

In this section, we examine the relationship between risk factors and victim prevalence from three points of view, starting with descriptive prevalence figures by supposed risk groups. Next, we use a logistic regression analysis to identify the relationship between the risk factors as a set and victim prevalences, and finally we use a CHAID analysis to identify the most vulnerable subgroups.

All known risk factors that were present in our questionnaire (sex, age, education, presence of children, single parenthood, divorce, childhood domestic violence victimization, drinking frequency, typical number of drinks, working status, and type of health insurance (proxy for SES) were tested for significant relationships with experiencing domestic violence as an adult.

Table 3 shows the risk factors that have a significant relationship with experiencing domestic violence as an adult. All types of domestic violence experiences in childhood are associated with a large increase in all types of domestic violence experiences as an adult. Other risk factors are the female gender, a young age, divorce, and having children.

Some of the risk factors in Table 3 are correlated; for example, 46% of the respondents who were victims of sexual violence in childhood have experienced other forms of physical violence in their youth as well, compared to 16% of respondents who have not been sexually abused as children,  $\chi^2(1) = 53.2$ ,  $p < .001$ . To examine the relationship between our set of predictors and the dependent variables, we used a logistic regression analysis. The results of this analysis are displayed in Table 4. For the analysis of the dependent variable "sexual violence" only female respondents were used, because the number of male adult victims was too small ( $n = 3$ ).

The most salient part of Table 4 is that for women, the risk of becoming a victim of domestic violence as an adult seems to be influenced by a complex mixture of factors, while for men only a young age, low education, and/or

**Table 3.** Percentage of Adult Victims, by Risk Factors

	Psychological	Physical	Sexual	Any
Sex				
Male	20	11	1	25
Female	32**	22***	9***	38***
Age				
18-30	33***	19*	5	41***
31-49	30***	21*	8	35***
50+	18	12	5	22
Education				
≤ Prevocational	29	20*	6	35**
Sr. 2nd vocational/preuniversity	27	17	5	34**
≥ Higher professional education	20	12	5	23
Civil state				
Never married	31	24	6	28
Married/cohabiting	25	11	5	27
Divorced	31	30***	6	42*
Widow(er)	21	24	13	23
Children in household				
None	24	15	6	30
1-2	27	17	4	33
>2	32	25*	9	39*
Single parent				
No	24	16	6	32
Yes	32	39**	9	53**
Victim as a child, psychological				
No	22	15	4	28
Yes	55***	34***	13***	61***
Victim as a child, physical				
No	21	14	4	27
Yes	41***	29***	10**	52***
Victim as a child, sexual				
No	22	15	4	28
Yes	64***	46***	31***	76***
Total	27	17	6	33

Groups with significant higher prevalence: \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

psychological violence victimization in childhood are related to adult experiences with domestic violence.

For both men and women, a higher education is associated with a small prevalence decrease for all types of violence (see Table 3); when all types are

**Table 4.** Significant B-Weights in Logistic Regression Analysis

	Any		Psychological		Physical		Sexual
	Men	Women	Men	Women	Men	Women	Women
$\chi^2(9)=$	44.8***	70.9***	34.7***	54.3***	20.1*	46.8***	28.3**
Age	-.03**	-.02**	-.03**	-.02*	-.03*		
Education	-.2*	-.2*		-.2*			
Divorced						.8*	
Single parent		.8*				.9*	
Victim as child, psych.	1.4**	.9**	1.5**	1.0**			
Victim as child, physical		.6*				.8*	
Victim as child, sexual		1.5***		1.3**		.9*	2.0***

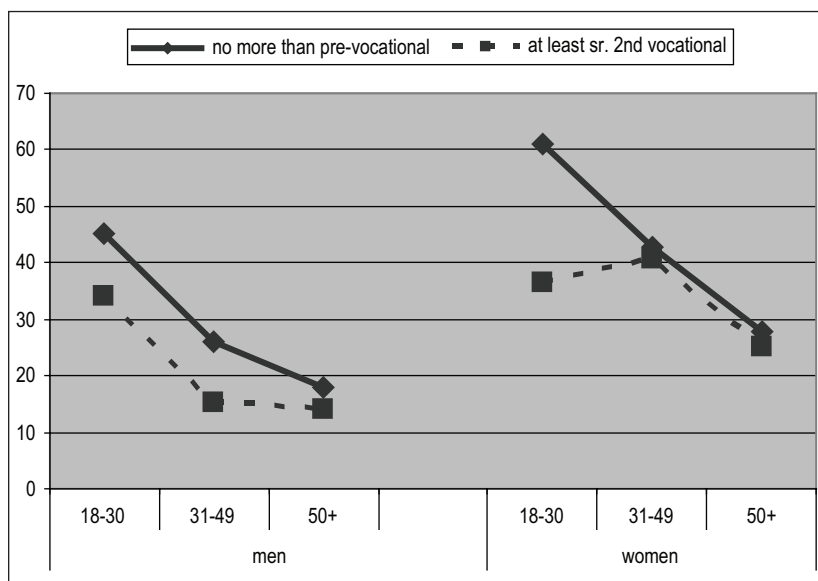
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

combined, the relationship is significant<sup>4</sup> (see Table 4). A young age is also associated with a higher prevalence for both sexes (see Table 4). The relationship between age, sex, and education and the prevalence of any type of domestic violence is presented in Figure 1. Especially for young women, a higher education seems to be a protective factor for domestic violence.

To identify the most important determinants of adult experiences with domestic violence and identify vulnerable subgroups, a CHAID analysis was undertaken for each type of violence. Because childhood experiences appear to be so strongly correlated with adult experiences (see Tables 3 and 4), childhood experiences are likely to be the most significant determinant. More subtle determinants may become invisible in CHAID trees when these are heavily influenced by childhood experiences in the first nodes. Therefore, the determinants of adult experiences when childhood DV victimization is left out are also reported here.

### *Psychological Violence*

Figure 2 shows that childhood experiences with domestic violence are the most important determinants for adult experiences with psychological domestic violence. The risk of experiencing psychological violence as an adult is almost three times as high for women who have experienced sexual violence in childhood (68%), compared to those who have not (25%).



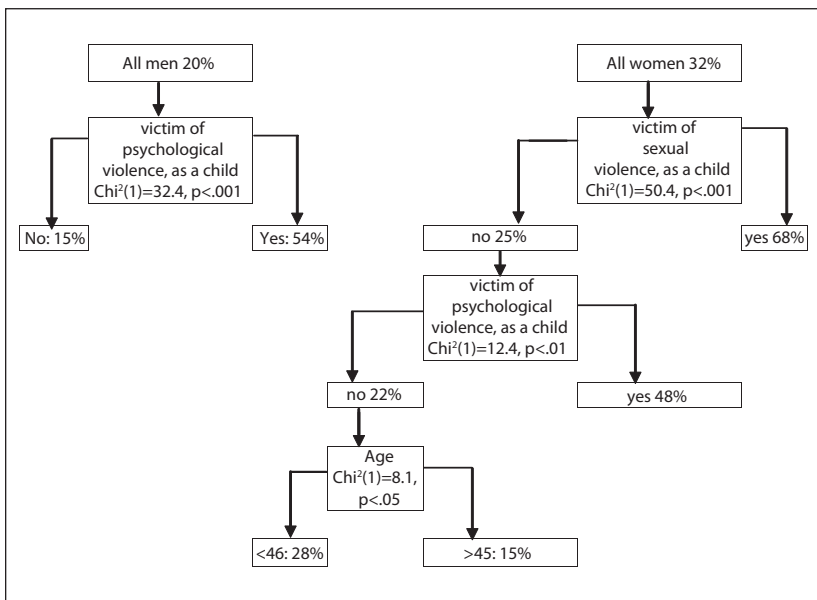
**Figure 1.** Prevalence of domestic violence as an adult by age, sex, and education

For women who have not experienced sexual violence in childhood, experiences with psychological violence as a child double the risk of experiencing psychological violence as an adult. For men, childhood experiences with psychological violence are the most important determinant for becoming a victim of psychological violence as an adult; the risk becomes almost five times as high.

For women without childhood experiences with sexual or psychological DV, age is the most important determinant for adult experiences with psychological violence; the percentage for women aged 18 to 45 is almost twice as high compared to older women. The elderly generation may indeed have fewer experiences with psychological violence, or bias may be caused by memory effects.<sup>5</sup>

*Excluding childhood experiences.* For men, no other significant determinant (apart from the previously discussed childhood experiences) has been found.

For women, age is the most important determinant if childhood experiences are left out: the percentage of victims is over three times as high for women aged 18 to 65, compared to women older than 65: 34% versus 10%,  $\chi^2(1) = 11.2$ ,  $p < .01$ . For the 18 to 65 age category, women with a steady



**Figure 2.** Percentage victims of psychological violence, as an adult

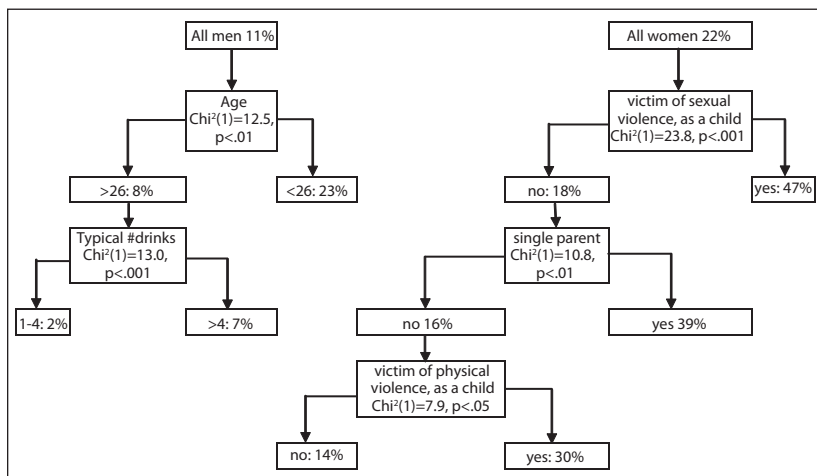
job have a lower risk than not working, or occasionally working women: 31% vs. 42%,  $\chi^2(1) = 5.1, p < .05$ .

**Conclusion.** The regression analysis and the CHAID both identify childhood experiences with domestic violence as the most important determinants for adult experiences with psychological domestic violence, followed by age. The CHAID also identifies women aged 18 to 65 without a steady job as vulnerable group.

### Physical Violence

The most important determinants of domestic violence victimization as an adult for men are a young age, or habitually drinking over four drinks at a time (see Figure 3).

For women, experiences with sexual violence as a child are the most important predictor of adult physical domestic violence victimization. For women who have not experienced sexual violence in childhood, single parenthood is the most important predictor: single mothers have almost three



**Figure 3.** Percentage victims of physical violence, as an adult

times as much risk of physical domestic violence victimization. For women who are not single mothers and are not sexually abused in childhood, physical domestic violence victimization in childhood doubles the risk of becoming a victim of physical domestic violence as an adult.

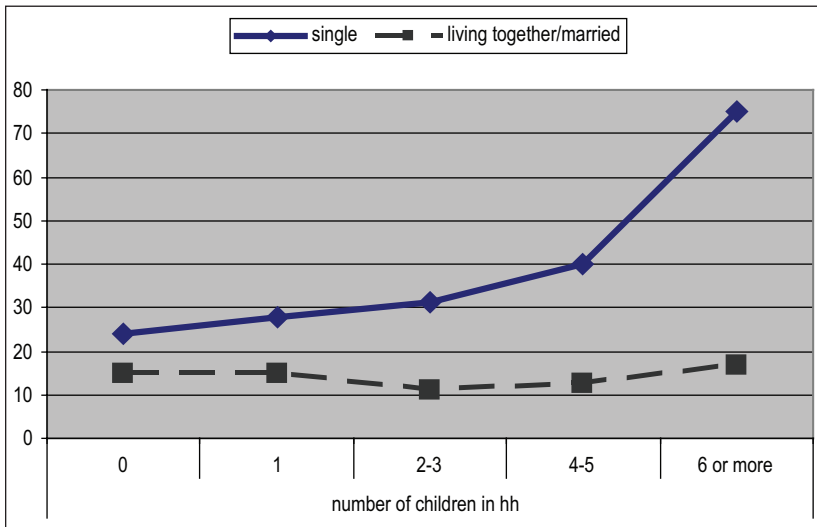
**Excluding childhood experiences.** For men, childhood experiences are no determinant of adult experiences with physical domestic violence, so leaving out childhood experiences does not change the results of the analysis.

If childhood experiences are left out, divorce is the most important determinant for female victims of physical domestic violence over a year ago: 11% of married/cohabiting women, 21% of single (never married) women and widows, and 36% of divorced women were physically abused more than 12 months before participating in the survey.<sup>6</sup>

For single women, the risk of physical violence victimization increases with the number of children in the household,  $\chi^2(3) = 8.5, p < .05$ , Kendall's  $\tau = .15, p = .05$  ( $n = 152$ ); see Figure 4.

**Conclusion.** For women, the regression analysis and the CHAID both identify childhood experiences with domestic violence and divorce as the most important determinants for adult physical domestic violence victimization. Other risk factors are single parenthood (regression analysis), especially when the number of children increases (CHAID).





**Figure 4.** Prevalence of female physical DV victimization, by number of children in the household and marital status

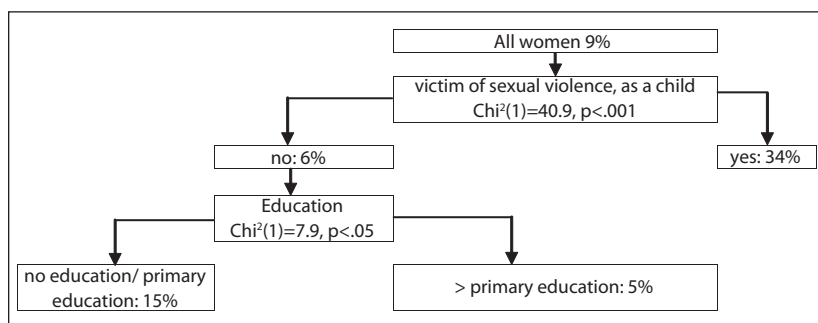
A young age is the most important risk factor for men. The CHAID also identified heavy drinking older men as a subgroup with increased risk subgroup for physical domestic violence.

### *Sexual Violence (Women)*

Sexual DV victimization in childhood is the most important predictor of sexual domestic violence victimization later in life: the risk for childhood victims is almost six times higher than for nonvictims (see Figure 5).

Women who have no experiences with sexual domestic violence as a child are most vulnerable if they are low educated: the percentage of female victims is three times as high for women who have no more than primary education, compared to women with at least secondary education.

*Excluding childhood experiences.* If childhood experiences are left out, a low education remains the most important predictor for experiencing sexual domestic violence as an adult with a similar ratio: 20% of women who have no more than primary education and 8% of women with at least secondary education are adult victims,  $\chi^2(1) = 8.1, p < .05$ .



**Figure 5.** Percentage female victims of sexual violence, as an adult

**Conclusion.** Sexual violence in childhood is the most important determinant for adult sexual domestic violence victimization. The CHAID also identified low educated women as vulnerable group.

## Discussion

One out of three people (25% of men, 38% of women) in Curacao have experienced some form of domestic violence at some point in their adult lives. The female victimization rates are similar to the prevalences found by Heise et al (1994) and the WHO (2006) in Latin America and the Caribbean: female victimization rates lie mostly between 20% and 30% for physical violence (22% in Curacao) and around 10% to 15% for sexual violence (9% in Curacao).

Compared to adult men, adult women are 1.6 times as likely to experience psychological violence, two times as likely to experience physical violence, and nine times as likely to experience sexual violence. This gender asymmetry is consistent with findings in the United States (National Violence Against Women Survey, 1998) and the United Kingdom (British Crime Survey, 2001).

## Men

For men, a young age, a low education, and psychological abuse in childhood is associated with a higher risk of adult domestic violence victimization. Especially the prevalence of adult psychological violence victimization increases sharply for men who were psychologically abused as children: the percentage of adult men who have been put down or ridiculed on a

regular basis by someone in their inner social circle, is over three times as high for men who have experienced this in childhood as well, compared to men who have not. Further research is necessary to determine the nature of this association, especially regarding the source of the abuse. Does the way parents treat their boys continue when they become men, or do psychologically abused men have a stronger tendency to end up with psychologically abusive women?

Physical domestic violence victimization is reported by 1 out of 10 men. Higher prevalences are associated with a young age and with more than average drinking habits.

## **Women**

Women have three risk factors in common with men: a young age, a low education level, and psychological domestic violence victimization in childhood. But for women, the risk of becoming an adult victim increases with any type of domestic violence victimization in childhood. Psychological or physical abuse as a child is associated with higher prevalences of psychological and physical abuse in adulthood respectively, but the most damaging childhood experience in terms of risk increase is sexual violence victimization. Sexual violence victimization in childhood is associated with a higher prevalence of all types of domestic violence in adulthood; the prevalence of psychological and physical violence is 2.5 times as high for women who have been sexually abused as girls, and the prevalence of sexual violence is over five times as high, compared to women who have not been abused.

Consistent with current literature, we found a much higher prevalence of physical DV victimization for divorced women and for women who are single parents, especially if there are many children in the household.<sup>7</sup> For single women, the prevalence increases with the number of children in the household from 23% to 62%.

The total female victimization rates range from 14% of married/cohabiting women, 24% of widows, 28% of single (never married) women, and 38% of divorced women. But IPV may be more severely underestimated in current couples than in separated couples, because DV victims who are still in a relationship with their abuser are less likely to communicate their experiences in this type of survey than separated victims are (Johnson et al., 2008).

A steady job seems to offer some protection against psychological violence: 31% of women with a steady job and 42% of not working, or occasionally working women report being psychologically abused as adults.

## Conclusions

The most important risk factors for domestic violence in Curacao are being female, a young age, low education, and domestic violence victimization in childhood. Divorce, single parenthood, and unemployment increase the risk for women, but not for men.

These findings are consistent with current literature on the subject. It is evident that the mechanisms that increase vulnerability are not identical for men and women. This could be partly attributable to the fact that domestic violence is different in context, nature, and severity, depending on gender. A deeper analysis of these aspects of domestic violence in the Caribbean is imperative.

An important limitation of the current study is the lack of information on the context of DV victimization. Data on violence initiation, intention, and motivation have not been collected; so prevalences and gender differences regarding “common couple violence” versus “intimate terrorism” cannot be determined yet. Furthermore, DV in the form of stalking is not studied explicitly although some types of psychological violence that overlap with stalking were included in the questionnaires, like “being watched all the time.” It is recommended to investigate the prevalence of this type of DV in Curacao as well; living in a small, insular community may facilitate stalking.

To obtain a realistic and nuanced interpretation of all characteristics of domestic violence, inferences on the subject should preferably be made considering findings from both national crime surveys and family conflict studies, or with study designs that combine the strengths of both types of research: nationally representative samples (including men and women), and questionnaires that include all possible experiences of psychological, physical, and sexual assaults by current and former partners, family, and friends.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

## Notes

1. Two recent Caribbean crime victimization studies, The Jamaican National Crime Victimization Survey (2006) and the 2008 Victim Survey in Bonaire, Curacao and Sint Maarten, did not include domestic violence.

2. The consistency across survey modes was high (Van Wijk, de Leeuw, de Bruijn, 2012).
3. The questionnaire was first developed in Dutch and subsequently translated into Papiamento. The Papiamento version was checked extensively by native speakers.
4. For women, the relationship between level of education and psychological violence prevalence is also significant (see Table 4).
5. The literature on the subject shows that younger women are more vulnerable, so memory effects could be present for elderly women. The prevalence of recent experiences with violence (during the past year) has also been measured, but these percentages are too low to find significant age effects.
6. The total prevalences for physical DV victimization, including the past year, are 14% of married/cohabiting women, 24% of widows, 28% of single women, and 38% of divorced women.
7. The number of children in the household was asked in the questionnaire, not the number of children of the respondent.

## References

- Allen, J. (2004). *Domestic violence, sexual assault and stalking: Findings from the British Crime Survey*. London, UK: Home Office.
- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological bulletin*, 126, 651.
- Archer, J. (2006). Cross-cultural differences in physical aggression between partners: A social role analysis. *Personality and Social Psychology Review*, 10, 133-153.
- Barnish, M., & Great Britain. (2004). *Domestic violence: A literature review: Summary*. London, UK: HM Inspectorate of Probation.
- Bos, C., & Van Zanden, N. (2004). *Huiselijk geweld in Drenthe* [Domestic violence in Drenthe]. Assen, Netherlands: GGD Drenthe.
- Brush, L., & University of Wisconsin. (1989). *Violent acts and injurious outcomes in married couples: New data from the National Survey of Families and Households*. (National Survey of Families and Households Working Paper No. 6) Madison: University of Wisconsin Center for Demography and Ecology.
- Bunge, V. P., & Locke, D. (2000). *Family violence in Canada: A statistical profile 2000*. Ottawa, Ontario: Statistics Canada. Canadian Centre for Justice Statistics.
- Burke, J. G., Gielen, A. C., McDonnell, K. A., O'Campo, P., & Maman, S. (2001). The process of ending abuse in intimate relationships: A qualitative exploration of the transtheoretical model. *Violence Against Women*, 7, 1144-1163.
- Centraal Bureau voor de Statistiek Nederlandse Antillen. (2009). *Resultaten arbeidskrachtenonderzoek Curacao 2009* [Labour research results, Curacao 2009]. Willemstad, Netherlands Antilles: Author.

- Clark, C. (2010). The role of the extended family in women's risk of intimate partner violence in Jordan. *Social Science & Medicine*, 70, 144-151.
- Coid, J. (2000). A survey of women's experience of domestic violence attending primary care in East London. In *Conference report: Domestic violence a health response: Working in a wider partnership*. London, UK: Department of Health.
- Dijk, T., & Infomart, b.v.; Netherlands. (1997). *Huiselijk geweld: Aard, omvang en hulpverlening* [Domestic violence: The nature, scope, and outreach] Hague, Netherlands: Research Office Information, Information and Publicity Department.
- Douglas, K., & Dutton, D. (2001). Assessing the link between stalking and domestic violence. *Aggression and Violent behavior*, 6, 519-546.
- Ehrensaft, M. (2003). Intergenerational transmission of partner violence: A 20-year prospective study. *Journal of consulting and clinical psychology*, 71, 741-753.
- Eswaran, M., & Malhotra, N. (2008). *Domestic violence in developing countries: Theory and evidence*. Vancouver, British Columbia, Canada: University of British Columbia
- Foran, H. (2008). Alcohol and intimate partner violence: A meta-analytic review. *Clinical Psychology Review*, 28, 1222-1234.
- Gadd, D. (2002). *Domestic abuse against men in Scotland*. Edinburgh, UK: Scottish Executive Central Research Unit.
- Geneeskundige en Gezondheids Dienst Amsterdam. (2008). *De Amsterdamse gezondheidsmonitor* [The Amsterdam Health]. Amsterdam, Netherlands: Author.
- Gomez, A. (2011). Testing the cycle of violence hypothesis: Child abuse and adolescent dating violence as predictors of intimate partner violence in young adulthood. *Youth and Society*, 43, 171-192.
- Heise, L., Pitanguy, J., & Germain, A. (1994). *Violence against women: The hidden health burden*. Washington, DC: World Bank.
- Herschbach, P. (2004). Psychological problems of cancer patients: A cancer distress screening with a cancer-specific questionnaire. *British Journal of Cancer*, 91, 504-511.
- Johnson, M. (2005). The differential effects of intimate terrorism and situational couple violence: Findings from the National Violence Against Women Survey. *Family Issues*, 26, 322-349.
- Johnson, M. (2008). *A typology of domestic violence: Intimate terrorism, violent resistance, and situational couple violence*. Boston, MA: Northeastern University Press.
- Johnson, M. P., Leone, J. M., & Xu, Y. (2008). *Gender, intimate terrorism, and situational couple violence in general survey data: The gender debate revisited—again*. Poster presented at the National Council on Family Relations annual meeting. Little Rock, AR.
- Kershaw, C. (2001). *The 2001 British Crime Survey: England and Wales*. London, UK: Government Statistical Service.

- Kimmel, M. (2002). "Gender symmetry" in domestic violence: A Substantive and Methodological Research Review. *Violence Against Women*, 8, 1332-1363.
- Lünnemann, K. (2005). *Geweld binnen en buiten: Aard, omvang en daders van huiselijk en publiek geweld in Nederland* [Violence inside and outside: Nature, scope, and perpetrators of domestic and public violence in the Netherlands]. Meppel, Netherlands: Boom Juridische Uitg.
- Marscha, V., & en Verweel, P. (2005). *De Curaçaose man. Vrouwen over de sociale identiteit van Curaçaose mannen* [The Curaçao man. Women on the social identity of Curaçao men] Amsterdam, Netherlands: SWP
- McKinney, C. (2010). Does alcohol involvement increase the severity of intimate partner violence? *Alcoholism: Clinical and Experimental Research*, 34, 655-665
- Melton, H. (2000). Stalking: A review of the literature and direction for the future. *Criminal Justice Review*, 25, 246-262.
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties (Den Haag). (2010). *Aan de slag met sterke vrouwen in het Koninkrijk: Onderzoek naar beleid en praktijk* [Getting started with strong women in the Kingdom: Research into policy and practice]. Hague; Curaçao: Author; University of the Netherlands Antilles
- Red Thread Women's Development Programme, Peake, L. (1999). *Women researching women: Study on issues of reproductive and sexual health, and of domestic violence against women in Guyana*. Georgetown GY: IDB.
- Richards, L. (2003). *Findings from the multi-agency domestic violence murder reviews in London*. London, UK: Metropolitan Police.
- Richardson, J. (2002). Identifying domestic violence: Cross sectional study in primary care. *British Medical Journal*, 324, 274-277.
- Riggs, D. S., Caulfield, M. B., & Street, A. E. (2000). Risk for domestic violence: Factors associated with perpetration and victimization. *Journal of clinical psychology*, 56, 1289-1316.
- Schumacher, J. A., Slep, A. M. S., & Heyman, R. E. (2001). Risk factors for male-to-female partner physical abuse. *Aggression and violent behavior*, 6, 281-352.
- Seegobin, W. (2002). Caribbean Families. In J. Ponzetti, (Ed.), *International encyclopedia of marriage and family* (2nd ed.). New York, NY: Macmillan.
- Siegel, J., & Williams, L. M. (2001). *Risk factors for violent victimization of women: A prospective study* (Final report). Washington, DC: U.S. National Institute of Justice.
- Straus, M. (2000). Physical violence in American families: Incidence rates, causes, and trends. *Violence and Abuse Abstracts*, 6(3).
- Straus, M. A., & Douglas, E. M. (2004). A short form of the Revised Conflict Tactics Scales, and typologies for severity and mutuality. *Violence and victims*, 19, 507-520.
- Tjaden, P., & Thoennes, N. (2000). *Full report of the prevalence, incidence, and consequences of violence against women: Findings from the National Violence*

- Against Women Survey*. Washington, DC: U.S. Dept. of Justice Office of Justice Programs National Institute of Justice.
- Tjaden, P., & Thoennes, N. (2001). *Stalking: It's role in serious domestic violence cases*. Denver, CO: Center for Policy Research.
- Walby, S., & Myhill, A. (2001) Assessing and managing risk. In J. Taylor-Browne (Ed.), *What works in reducing domestic violence? A comprehensive guide for professionals*. London, UK: Whiting & Birch.
- Watson, D., & Parsons, S. (2005). *Domestic abuse of women and men in Ireland: Report on the national study of domestic abuse*. Dublin, Ireland: Stationery Office.
- Wijk, N.Ph.L. van. (2004). Statistisch overzicht van de gezondheidszorg Curaçao: 1996-2000. Curaçao: GGD Curaçao, Afdeling Epidemiologie en Onderzoek.
- Wijk, N.Ph.L. van (2011a). *Technical Report 1: Questionnaire Development and Operationalization—Domestic Violence in Curacao*. Curacao: Medical and Public Health Service of Curaçao
- Wijk, N.Ph.L. van (2011b). *Technical Report 2: Data Collecting—Domestic Violence in Curacao*. Curacao: Medical and Public Health Service of Curaçao.
- Van Wijk, N.Ph.L., de Leeuw, E. D., & de Bruijn, J. G. M. (2012). *The effectiveness of a tailored mixed mode approach for surveying sensitive topics in the Caribbean*. Curacao: Ministry of Health, Environment and Nature of Curacao and University of the Netherlands Antilles
- World Health Organization. (2002). *World report on violence and health*. Geneva, Switzerland: Author.
- World Health Organization. (2006). *WHO multi-country study on women's health and domestic violence against women*. Geneva, Switzerland: Author.

## Bios

**N. Ph. L. van Wijk**, MSc in psychometrics & statistical techniques and social psychology (1999), has work experience in health statistics, marketing research, and statistical consultancy.

**J. G. M. de Bruijn** is a professor in sociology at the University of the Netherlands Antilles and at the VU University in Amsterdam. She published on women's studies issues, gender inequality on the labour market, matrilocality and higher education in small island economies. Recently she is involved in a three-years research project on regional migration and the effects on a small island development state.